



PDT is also known as “blue light”. It is used for the treatment of actinic keratoses (AKs). AKs are precancerous lesions which are usually pink and rough like sandpaper. If left alone they have the potential to develop into squamous cell carcinoma. In an effort to remove these lesions and prevent skin cancer development PDT can be used. It is beneficial when one would like to treat an entire affected area. This procedure treats the precancerous changes while providing a cosmetic improvement in the appearance of the skin.

How does it work?

PDT involves the application of a photosensitizer to the skin. This is a solution that is placed on the area to be treated (usually the face, neck, scalp, forearms or hands) and then left to “incubate”. This incubation period can vary depending on the patient and location being treated, however it is typically 2-3 hours. After the cream is applied in the office you may leave and then return after the specified incubation period. During this incubation period the cream that was applied is absorbed by the AKs and is converted into a light sensitive by-product. We then activate this chemical by placing you under the blue light for 16 minutes and 40 seconds.

What should I expect?

- The Levulan solution that is applied is clear. It will not be noticeable. You will be able to leave the office and can run errands during the incubation period (time between application of the solution and the time you go under the light). Avoid the sun during this time.
- During the blue light treatment you will wear goggles to protect your eyes and you will be placed under a light. You should expect some discomfort and burning in the areas treated. This is alleviated by use of a handheld fan and usually improves after about 6 minutes. Bring headphones so that you can listen to something during the treatment. This will help pass the time.
- Once the treatment is finished you will wash the treated area and apply sunscreen. A towel, cleanser and sunscreen will be provided. Wash the treated area with the cleanser, pat dry with the towel and finish by applying the provided sunscreen before leaving the room. Once you leave the treatment room, you will be directed to the reception area to schedule a follow up in 6-8 weeks. At this time we will assess your response and determine if any further therapy is indicated.
- The treatment area should become red and start to peel that evening. This peeling may last for 1-2 weeks. It may be a mild or significant reaction. This ranges anywhere from mild redness like a sunburn to significant redness, peeling and crusting. Given that some reactions will be significant with peeling lasting for up to 2 weeks we recommend that one has no significant social or work events in the 2 weeks after the treatment.
- As the areas peel you should avoid scrubbing the area. Instead gently cleanse with soap and water then apply Vaseline or Aquaphor to the healing areas several times daily.
- If you have discomfort or pain following the procedure you may take acetaminophen or ibuprofen and should use cold compresses. Place a damp washcloth in the freezer and apply to the skin periodically to help cool the skin. If you have pain, fevers, chills or oozing that is increasing as the days progress, this can be a sign of infection. You should call the office to be evaluated.
- It is necessary to practice strict sun avoidance for 48 hours after the treatment. The photosensitive chemical remains in the skin for about 40 hours after it is applied. UV light as well as strong overhead lights will continue to activate the cream for the first 2 days, eliciting a burning sensation.
- Cold sores (also known as fever blisters or herpes simplex infections) can occur after PDT in people that are prone to them. It is important to tell your provider that you may be predisposed to cold sores prior to the treatment so that anti-viral prophylaxis is used (typically 2 grams of valacyclovir is taken before the treatment and is repeated 12 hours later).
- One can expect an improvement in the precancerous changes as well as the appearance of the skin following PDT. It removes many of the imperfections caused by UV light exposure over time leading to a brighter smoother complexion. Some patients will require 2 or more treatments.